



# CITY OF LODI

## COUNCIL COMMUNICATION

AGENDA TITLE: Participation in East San Joaquin Water Authority's Groundwater Injection/Extraction Test Project (\$50,000)

MEETING DATE: November 19, 1997

PREPARED BY: Public Works Director

RECOMMENDED ACTION: That the Council authorize the appropriation and payment of \$50,000 to the East San Joaquin Parties Water Authority for its test injection/extraction project.

BACKGROUND INFORMATION: In the approved 1997/98 budget, \$75,000 was included for an East San Joaquin Parties test project (see attached budget sheet H-28). This project and the history of this project was recently submitted to the City Manager and City Council under a memo from the Water/Wastewater Superintendent. This memo, dated September 19, 1997, is attached for your information.

The test project itself will investigate the feasibility of utilizing the aquifer under east San Joaquin County for water storage. The project includes drilling of one injection/extraction well and one monitoring well. The water from East Bay Municipal Utility District's Mokelumne aqueduct will be used for the test. This project will demonstrate and quantify the ability of the aquifer to accept and distribute water through injection wells. The ability to recover water from the aquifer will also be demonstrated and quantified. If this project is successful, the East San Joaquin Parties would then be looking at the development of a well field for injection of wet winter waters from various sources to improve the groundwater subsidence in this area.

FUNDING: 1997/98 Water Operating Budget \$75,000

Funding Available: Vivian M. Athie  
Finance Director

Jack L. Ronsko  
Jack L. Ronsko  
Public Works Director

JLR/lm

Attachments

cc: Water/Wastewater Superintendent

APPROVED: \_\_\_\_\_

H. Dixon Flynn  
H. Dixon Flynn -- City Manager

## SUMMARY OF SIGNIFICANT EXPENDITURES AND STAFFING CHANGES

		1997-98 Requested Cost	City Manager Approved	1998-99 Requested Cost	City Manager Approved	Comment
<b>Public Safety</b>						
Police Protection						
Police Administration						
Equestrian unit subsidy		4,470	4,470			
Computer scanner, printer, software		11,500	11,500			police grants
Computer printers & terminals (replacement)		5,600	5,600			police grants
Police Operations						
Dispatch/Records Manager	1	66,310				
Dispatchers/Jailers	1	38,780			1 38,780	
Handheld citation computers		20,000	20,000			police grants
Lap Top computers - Watch commanders		12,000	12,000	(9,000)	(9,000)	police grants
Lap Top computers - Traffic/MAIT Team		10,000	10,000			police grants
Call check capability for CAD		7,467	7,467	(7,301)	(7,301)	police grants
Radar unit replacement		8,000	8,000	(4,000)	(4,000)	
Motorcycle emergency light system		3,450	3,450	(1,725)	(1,725)	
Bomb Squad Funding		2,500	2,500			
Police Investigations						
Lap Top computers - Investigations		10,500	10,500			police grants
Stolen Vehicle Bait System		6,600	6,600			police grants
Synthesized audio intelligence system		4,025	4,025			police grants
Fire Safety						
Fire Administration						
Add Captains - Suppression	3	121,025			1 55,000	
Fire Training						
Portable PC		3,900	3,900			one time cost
<b>Total Public Safety</b>	<b>5</b>	<b>336,127</b>	<b>110,012</b>	<b>(22,026)</b>	<b>2 71,754</b>	
<b>Public Utilities</b>						
Water Utility Services						
Water Conservation Coordinator	0.25	12,663	0.25 12,663			upgrade from part time position
Master plan update Phase II		40,000	40,000			
East San Joaquin Parties study		75,000	75,000			
Wastewater Utility Services						
Electric Utility Services						
Policy, Legislative & Regulatory						
Senior Utility Management Admin				1 69,775	-	
Electrical Engineering & Operations						
Hire consultant Audocad input		15,000	15,000			
Senior Programmer/Analyst	1	54,675				
Electrical Engineer	1	70,275	1 70,275	14,180	14,180	95 reorg eliminated position
Senior Electrical Estimator		4,390	4,390			current funding level
Electrical Estimator	1	81,725		(14,400)		one time equip costs
Auto cad mapper - temporary		11,205	11,205			
Copy Machine (replacement)		8,500	8,500			current funding level
Office equip-workstations				9,500	9,500	current funding level
Laser Jet Printer		5,000	5,000			current funding level
Portable Watt-hour tester		3,500	3,500			current funding level
Office Wall Remodel		7,500	7,500			
Travel expenses		7,000	7,000			
Administrative Clerk II - temporary		10,645	10,645			95-97 funded .5 clerical position
Electric Construction & Maintenance						
Electric Utility Clerk	1	43,285				
Linemen/Linewoman	2	129,020			-	
Line Truck Driver/equipment operator	1	47,740				
Linemen/Linewoman				1 64,510	-	
Groundperson/Apprentice Linemen		220,750			-	
Increase contract tree trimming		137,242	137,242			
Safety Equipment		7,890	7,890	10,835	10,835	current funding level
Travel expenses		7,000	7,000			
Small tools and equipment		15,000	15,000	(5,000)	(5,000)	current funding level
Electric Services						
Prof fees-design and eng'g studies		26,000	26,000	1,000	1,000	
Repairs to Office equipment		5,000	5,000			current funding level
Travel expenses		3,450	3,450	3,450		
Data Processing Software		17,000		(2,000)	-	



## MEMORANDUM, City of Lodi, Public Works Department

**To:** City Council  
City Manager

**From:** Water/Wastewater Superintendent

**Date:** September 19, 1997

**Subject:** East San Joaquin Parties Water Authority Update

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### Background

East Bay Municipal Utility District (EBMUD) has been working diligently for the last several years to secure a source for an additional 70,000 acre feet of water in dry years. Lodi produces approximately 13,000 acre feet per year. This has provided the impetus for the formulation of a regional conjunctive use program involving EBMUD and Eastern San Joaquin County interests. Conjunctive use of water supplies involves maximizing the use of surface water when available and relying on groundwater in the drier years. In October of 1996, the Eastern San Joaquin Parties Water Authority (ESJPWA) was established, consisting of Woodbridge Irrigation District, North San Joaquin Water Conservation District, Central San Joaquin Water Conservation District, Stockton East Water District, California Water Service Company (associate member) and the cities of Lodi and Stockton. The purpose of the ESJPWA was to act as a planning agency to engage in negotiations with EBMUD regarding the conjunctive use plan and to study other means to meet the future water supply needs of Eastern San Joaquin County.

The focus of the EBMUD project changed in 1996 from a project which relied heavily upon the use of groundwater storage in San Joaquin County to one that diverts water from the American River in cooperation with Sacramento County and the City of Sacramento. EBMUD, however, remains interested in the use of the Eastern San Joaquin County groundwater basin as a means to store water. The purpose for EBMUD's use of the groundwater basin has shifted in emphasis from a primary source to a supplemental source of water in dry years which could possibly result in the ability to downsize the needed conveyance and treatment facilities contemplated for the transfer of 300 cubic feet per second of water to the East Bay, with consequent cost savings to EBMUD. In order for this to work, a number of injection/extraction wells would need to be constructed to convey water to and from the groundwater basin. The feasibility of such a project is unknown without pilot testing.

In order to study the feasibility of a large injection/extraction project that would meet the needs of EBMUD as well as Eastern San Joaquin County, ESJPWA decided to move ahead with a pilot project, on its own, in February of 1997. The envisioned project would be one in which water would be taken from the EBMUD Aqueduct, and through a series of injection wells, water would be forced into the aquifer near the Aqueduct and then extracted to confirm the feasibility of injection and extraction. The ESJPWA, working through San Joaquin County as the contracting agent, hired Boyle Engineering of Sacramento, to initiate the preliminary design of the pilot project.

Present Situation

A site has been selected and secured for the pilot project. It is located adjacent to the EBMUD right-of-way, south of Live Oak Road and west of Jack Tone Road on the Charles Beckman properties (see attached map).

Plans and specifications have been completed and on September 8, 1997, the ESJPWA Board approved and authorized staff to call for bids. The one or two Injection/Extraction Well(s) project is estimated to cost between \$400,000 and \$500,000 and will be funded by San Joaquin County Flood Control and Water Conservation District budget. The ESJPWA Board hopes to award the project on October 17, 1997. An agreement has been finalized with EBMUD to furnish to the project 1,000 to 3,000 acre feet of water at a cost of \$1.00 per acre foot from December 1, 1997 through June 30, 1998. Upon completion of the project, EBMUD would be entitled to retrieve 50 percent of the water put into the ground. (I doubt EBMUD would find it cost effective to pump 500-1500 acre feet back into their pipeline, but may do it for principal.)

The success of this pilot project would become a valuable bartering tool for ESJPWA with EBMUD and could lead to a full-scale Injection/Extraction Well System. This could begin the restoration of our continually declining water table beneath the Lodi region.

Councilman Keith Land, Public Works Director Jack Ronsko, and I have been and will continue to be actively involved in the ESJPWA. If you have any questions or need additional information, please contact me at 333-6740, Ext. 430.



Fran E. Forkas  
Water/Wastewater Superintendent

FEF/dsg

Attachment (Not Attached)

cc: Public Works Director  
City Engineer